RAKWA and HUBER undertake successful Sludge Dewatering Trial at Al Feliyah STP

HUBER Q-PRESS

The HUBER Technology Screw presses for sludge dewatering have become well-proven alternative for decanters or/and belt filter presses.

Mobile Package Plant, Plug & Play

The Huber screw press along with its accessories was containerized and mounted on trailer to become an easy to transport and setup unit for trial and demonstration runs. On site installation is fast and simple with only nominal utility connections required to run the press.

Sludge Dewatering Pilot Project

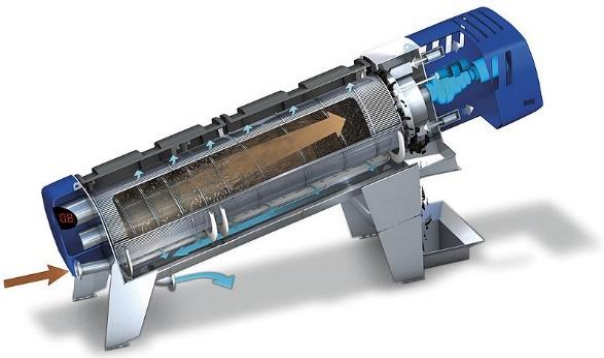
For trial run of the machine, Ras Al Khaimah sewage treatment plant was selected, since their current sludge dewatering centrifuge system was not satisfying in terms of power consumption, noise and maintenance as well as poor cake dryness.

PLANT CAPACITY
10 m³/hour

Delivery and installation was completed in less 1 day and better results were achieved even during the startup when compared with the existing in-situ system. Following process optimisation and polymer selection the cake dryness and supernatant clarity were improved further allowing increase throughput with significantly reduced power and chemical consumption. At this system the screw shaft operates with a speed of only 1-2 rpm, which is a main reason for the less consumption and low wear and tear of the machine.

Performance of Q-PRESS 440

Throughput	2-10 m³/h & 50-60 kg_{DS}/h
Polymer demand	5-9 kg/t_{DS}
Dewatering results	up to 26% DS (input 0.6-1% $_{DS}$)
Separation degree	95%
Screw rotation speed	0.4-1 RPM
Power consumption	0.17 kWh/m³.



Convincing Results

The pilot plant produced amazing results. The Q-PRESS for thickening and dewatering of 10 m³/h challenging activated sludge with more than 80% organic content, dewatered the thin sludge in a single step to crumbly cake of 26%$_{DS}$, Moreover the power consumption was less with only 75% than needed with the dewatering centrifuge. This is showing a clear path how to improve the carbon foot print of the plant. Q-PRESS installations can easily achieve a sludge volume reduction in excess of 90% with simple operation and low maintenance at minimum energy consumption. Furthermore, direct dewatering of the thin sludge avoids all additional costs that would incur for the operation of an upstream mechanical thickening system.

RENT A PLANT

This mobile sludge dewateering plant on trailer we offer on rental basis. If you want to improve your sludge handling you can test this latest technology directly on your site. Please contact MENA-Water and our experts will support you to explore this convincing latest technology.

MENA WATER FZC
P.O. Box: 120881, Plot D3-11, SAIF-Zone
Sharjah, United Arab Emirates
Tel.: +971 6 5575507 - Fax: +971 6 5575508
info@mena-water.com - **www.mena-water.com**

MENA WATER GmbH
Industriepark Erasbach A1
92334 Berching, Germany
Tel.: +49 8462 201 390, Fax: +49 8462 201 239
info@mena-water.de - **www.mena-water.de**

ISO 9001 REGISTERED
ISO 14001 REGISTERED OHSAS 18001 REGISTERED

Member of HUBER TECHNOLOGY Group
WASTE WATER Solutions